REMARKS

In response to the Official Action of September 30, 2005, claim 27 has been amended to correct an error when the preliminary amendment was filed upon entry into US national stage; namely, claim 27 failed to include the last eleven words as that claim exists in the PCT application at the time of entry into national stage. Thus, although claim 27 is presented as "currently amended," it is in fact as presented in the PCT application at the time of entry into the national stage.

Referring now to the art rejections set forth in the Official Action, it is respectfully submitted that claims 1, 2, 5, 6, 8-13, 24, 25 and 27 are not anticipated under 35 U.S.C. §102(b) in view of WO 01/31958, Hämäläinen.

With regard to claim 1, it is stated that Hämäläinen discloses such a method for controlling interfrequency handovers of a mobile station with specific recitation to page 7, line 12 through page 8, line 12 and page 10, line 26 through page 11, line 8. Hämäläinen does disclose an interfrequency handover (IFHO) method. However, the way IFHO is entered in Hämäläinen is different from that of the present invention as claimed. In particular, as discussed in the background section of the present application at page 2, lines 33 through page 3, line 7, Hämäläinen discloses a closed loop power control method. The need for interfrequency handover may be detected by determining the quality of the current communication connection or by estimating adjacent channel interference, for example, by measurement in the frequency used in the continuous mode.

As set forth at page 3, lines 2-9 of the present application, in Hämäläinen such measurements at the own frequency do not cause interference to other communication connections employing the same frequency. Thus, once the quality of the communication connection is determined or the adjacent channel interference is estimated, it is typically compared to a predetermined threshold value to determine

whether there is need to initiate preparatory measurements at available target frequencies.

However, Hämäläinen does not disclose that the proper threshold value for initiating preparatory measurements may vary, and that it is not necessarily easy or straightforward to determine suitable threshold values. The present invention is a technical solution to this problem.

Specifically, as set forth in the Abstract of Hämäläinen, it is stated that a set of criteria is provided that are to be observed during the continuous communication mode. It is observed whether at least one of said criteria is fulfilled during the continuous communication mode. As a response to the fulfilment of at least one of the criteria during the continuous communication mode, the operation of the mobile station is changed into the combined slotted communication mode and measurement mode.

Claim 1 of the present invention is also directed to a method for controlling interfrequency handovers of a mobile station, the mobile station comprising a continuous communication mode and a combined slotted communication mode and measurement mode. The method comprises the steps of changing the operation of the mobile station into the combined slotted communication mode and measurement mode for preparing an interfrequency handover, if at least a criterion specifying that a quality of a downlink signal relating to a channel on which communication takes place between the mobile station and the mobile communication system in the continuous communication mode is worse than a quality represented by a first target value, is fulfilled. The method of claim 1 further requires that the first target value in turn depends on a second target value, wherein the second target value is related to an outer loop power control of a transmission power of the downlink signal.

As set forth in the specification of the present invention at page 3, lines 10-11, the object of the present invention is thus to provide a flexible and straightforward method for controlling interfrequency handovers. This problem is solved in the present

invention and is claimed in claim 1. Claim 1 states that the quality of the communication connection (quality of a downlink signal relating to a channel on which communication takes place) is compared to a first target value, wherein the first target value depends on a second target value that is related to an outer loop power control of a transmission power of the downlink signal. For the reasons presented below, this solution as recited in claim 1, is neither anticipated nor suggested by Hämäläinen.

Specifically, Hämäläinen does not disclose a first target value which depends on a second target value wherein the second target value is related to an outer loop power control of a transmission power of the downlink signal. An embodiment of the present invention which discloses this dependence of the first target value on a second target value is seen in the present application at page 9, line 35 through page 10, line 18. In Hämäläinen, it is only a set of criteria which are provided that are observed during continuous communication mode, such as criterion 1, 2, 3a and 3b, set forth in Hämäläinen at page 7, line 20 through page 11, line 8. If at least one of these criteria is fulfilled during continuous communication mode, a response to this fulfilment is the operation of the mobile station being changed into the combined slotted communication mode and measurement mode. Therefore, there is no disclosure or suggestion in Hämäläinen of a first target value depending on a second target value wherein the second target value is related to an outer loop power control of a transmission power of the downlink signal.

It is therefore respectfully submitted that claim 1 is not anticipated by Hämäläinen. Since claim 1 is not anticipated by Hämäläinen, claims 2, 5, 6 and 8-13 are also not anticipated by Hämäläinen since these claims all ultimately depend from method claim 1.

Independent method claim 24 is also directed to a method for controlling an interfrequency handover of a mobile station which further recites that the interfrequency handover comprises a blind interfrequency handover and that the method comprises

the steps of comparing the determined quality factor value to a first target value for performing the blind interfrequency handover. In addition, claim 24 specifies that the quality factor value is also compared to a second target value and that the first target value is arranged to depend on the second target value and the second value is arranged to relate to an outer loop power control of a transmission power of the downlink signal. Therefore, the arguments presented above with regard to claim 1, also apply to claim 24 since Hämäläinen does not disclose that a first target value is arranged to depend on a second target value wherein the second target value is arranged to relate to an outer loop power control of a transmission power of the downlink signal.

It is therefore respectfully submitted that claim 24 is not anticipated by Hämäläinen.

Independent claim 25 is directed to a mobile station arranged to contain a continuous communication mode and a combined slotted communication and measurement mode. In the recited downlink power control means of the mobile station, the means are arranged to compare the determined quality factor value to a second target value and to generate power control commands based on the comparison, wherein the first target value is arranged to depend on the second target value and the second target value is arranged to relate to an outer loop power control of a transmission power of the downlink signal. Therefore, for reasons presented above with regard to claim 1, claim 25 is not anticipated by Hämäläinen.

Independent claim 27 is also directed to a mobile station which further has means for controlling blind interfrequency handovers. Independent claim 27 is similar to method claim 24 and for similar reasons as those presented above with regard to claims 1 and 24, it is not anticipated by Hämäläinen.

Referring now to the claim rejections under 35 U.S.C. §103, it is respectfully submitted that claims 3, 4 and 7 are not obvious in view of Hämäläinen, further in view

of US patent publication 2002/0126739, Tiedmann, Jr. et al, since claims 3, 4 and 7 all ultimately depend from claim 1 which, for reasons presented above, is believed to be allowable.
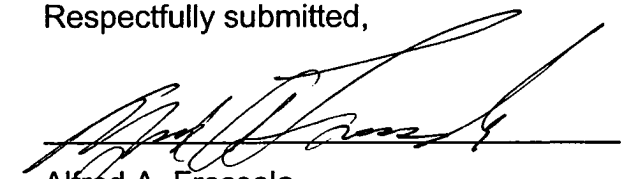
It is respectfully submitted that claims 14-22 and 26 are not obvious in view of Hämäläinen, further in view of US patent 6,081,714, Wakizaki, since claims 14-22 all ultimately depend from claim 1 and therefore are believed to be allowable in view of the allowability of claim 1. Claim 26 depends from independent mobile station claim 25 which, for reasons presented above, is believed to be allowable. Consequently, claim 26 is believed to be allowable.

Finally, claim 23 is not believed to be obvious in view of Hämäläinen, further in view of US patent 6,807,429, Subrahmanya, due to its dependency from claim 1 which is believed to be distinguished over the art.

In view of the foregoing, it is respectfully submitted that the present application, as amended, is in condition for allowance and such action is earnestly solicited.

The undersigned respectfully submits that no fee is due for filing this Amendment. The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this paper.

Respectfully submitted,

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Alfred A. Fressola
Attorney for Applicant
Registration No. 27,550

WARE, FRESSOLA, VAN DER SLUYS
    & ADOLPHSON LLP
Bradford Green, Building Five
755 Main Street, P.O. Box 224
Monroe, CT 06468
Telephone: (203) 261-1234
Facsimile: (203) 261-5676
USPTO Customer No. 004955